

NIP Inspector, Step 1

New Hires are placed at step one until they meet the minimum requirements and qualifications to move to step two.

To move to step two, an inspector at step one must first successfully complete a one year probationary period with the city of Milwaukee, and obtain the following inspection credentials as mandated by the State of Wisconsin:

1. Wisconsin Uniform Dwelling Code Inspector Certification
2. Wisconsin Uniform Dwelling Code Heating, Ventilation and Air-Conditioning (HVAC) Certification
3. Wisconsin Lead Risk Assessor Certification

An inspector holding these credentials upon entering the City of Milwaukee DNS-NIP section, with supervisor and DNS administrative approval, may be eligible for appointment to a higher career ladder step (based on certifications held at the time of appointment) with the one year probationary period waived for the sole purposes of this Career Ladder. Separate probationary period requirements mandated by the Department of Employee Relations still apply.

Secondly, an inspector must demonstrate a thorough knowledge pertaining to the fundamentals of performing basic construction inspections as they relate to good communication, construction methodologies, code knowledge, problem solving and code interpretation and its enforcement. Listed below is a representation of the core competencies that an inspector must have a thorough knowledge of:

General Competencies

- Customer Communication Skills
- Management and Control of Assigned Construction District
- Familiarity of Necessary Zoning
- Ability to coordinate with other DNS and City Entities
- Ability to Evaluate and Interpret Construction Plans
- Thorough knowledge of the Milwaukee Code of Ordinances
- Code Administration and Definitions of Commercial and 1&2 Family Construction Codes
- Familiarity of DNS processes and skill set with regards to computer programs

Wisconsin Uniform Dwelling Code (UDC) Competencies

Construction

- Design Criteria
- Loads & Materials
- Exits
- Interior Circulation
- Stairways & Elevated Areas
- Ladders
- Ramps
- Natural Light & Ventilation
- Ceiling Height
- Attic & Crawl Spaces
- Fire Separation & Dwelling Unit Separation
- Fire blocking

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- Smoke Detectors
- Automatic Fire Sprinklers
- Protection against Decay & Termites
- Foam Plastic
- Installation of Elevators or Dumbwaiters
- Excavations
- Erosion Control & Sediment Control
- Storm Water Management
- Excavations Adjacent To Adjoining Property
- Excavations for Footings & Foundations
- Footings
- Frost Protection
- Drain Tiles
- Foundations
- Floor Design
- Concrete Floors
- Garage Floors
- Wood Floors in Contact With the Ground
- Precast Concrete Floors
- Wood Frame Floors
- Decks
- Wall Design
- Exterior Covering
- Wood Frame Walls
- Masonry Walls
- Roof Design
- Roof & Ceiling Wood Framing
- Masonry Fireplaces
- Masonry Chimneys
- Factory-Built Fireplaces
- Construction in Floodplains
- Installation Standards of Manufactured Homes

Energy Conservation

- Energy Conservation Scope and Application
- Insulation Materials & Installation Basic Requirements and Protection
- Thermal Envelope Design & Requirements
- Prescriptive Insulation and Fenestration Criteria
- Specific Insulation Requirements
- Slab Floors
- Crawl Spaces
- Thermally Isolated Sunrooms
- Fenestration
- Air Leakage
- Vapor Retarders
- Ventilation & Moisture Control
- Indoor Temperatures & Equipment Sizing
- Temperature Control
- Duct Systems
- Duct & Plenum Sealing

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- Pipe Insulation
- Air-Conditioner & Heat Pump Efficiencies
- Replacement Furnace & Boiler Efficiencies
- Simulated Performance Alternative Energy Conservation

Heating, Ventilating & Air-Conditioning Design

- Selection of Heating Equipment
- Types & Location of Equipment
- Solid-Fuel Burning Equipment
- Safety Controls
- Combustion Air
- Mechanical Draft Systems
- Equipment Maintenance Information
- Air Distribution Systems
- Ductwork
- Damper, Registers & Grills
- Piping
- Factory-Built Chimneys or Vents
- Gas Vents
- Chimney Connectors, Smoke Pipes & Stovepipes
- Multiple Appliance Venting
- Condensate Drains
- Fuel Storage & Supply Systems
- Equipment Location and Operation

Lead Risk Assessor Competencies

- Regulatory role of Wisconsin DHS, Wisconsin DNR, OSHA, EPA, Milwaukee Health Department
- DHS 163
- MCO 66-20, 66-21, 66-22, 66-29
- Lead hazards relating to housing constructed pre/post 1978
- Health effects of lead ingestion/inhalation
- Identify interior and exterior lead hazards on properties
- Permissible levels of lead contamination
- Determine condition of paint/plaster as related to lead hazards
- Lead remediation methods
- Required worksite containment measures
- Required personal protective equipment for lead abatement workers
- Disposal methods for lead containing materials

An inspector must also meet or exceed the thresholds for advancement established in the **QUANTITATIVE CORE COMPETENCIES**. This separate quantitative core competencies packet for NIP Inspection is subject to review by Supervisor for applicability for time frame analyzed taking into consideration training, specialty projects, inspector workload, district composition, and other factors that may have an impact on performance.

Additional Steps.

After attainment of job required certifications and licensure as required in the job description along with supervisor and DER approval the inspector may begin advancing in the career ladder. The below listed steps may be achieved in any order.

In order to advance to pay step 2 using Step options 2-6, the inspector must have achieved the Step 1 requirements and be able to provide evidence of completion for one of the below listed Qualitative Steps.

In order to advance to pay step 3 using Step options 2-6, the inspector must have achieved the Step 1 requirements and be able to provide evidence of completion for two of the below listed Qualitative Steps.

In order to advance to pay step 4 using Step options 2-6, the inspector must have achieved the Step 1 requirements and be able to provide evidence of completion for three of the below listed Qualitative Steps.

In order to advance to pay step 5 using Step options 2-6, the inspector must have achieved the Step 1 requirements and be able to provide evidence of completion for four of the below listed Qualitative Steps.

In order to advance to pay step 6 using Step options 2-6, the inspector must have achieved the Step 1 requirements and be able to provide evidence of completion for five of the below listed Qualitative Steps.

In each case above, for advancement to a higher pay step, the inspector shall obtain the required Qualitative and Quantitative measures associated with the step they are requesting. The quantitative core competencies must be achieved in the sequential order as outlined in the Quantitative Core Competencies document. In addition, inspector's performance, customer service, job skill and knowledge is subject to review by the supervisor for applicability for the step being requested and the time frame to be analyzed taking into consideration training, specialty projects, inspector workload, district composition, and other factors that may have an impact on performance.

NIP Inspector, Step Option 2

To advance a step using step option two, an inspector shall obtain the job required certifications as outlined in step one. Step option two requires the inspector to obtain the following inspection credentials or certification issued by the International Code Council (ICC) and the State of Wisconsin:

1. ICC – Property Maintenance Code Certification
2. Wisconsin DHS Asbestos Inspector Certification

An inspector using step option two must demonstrate a thorough knowledge pertaining to the fundamentals of performing basic construction inspections as they relate to ICC International Property Maintenance Code and Milwaukee Code of Ordinance, as well as the Asbestos Inspector Certification.

These certifications requirements are intended to represent a mastery in a particular subject that will continue to be built upon in other career ladder steps.

Listed below is a representation of the core competencies that an inspector must have a thorough knowledge of to advance using step option two:

ICC International Property Maintenance and Milwaukee COA

- Inspect the overall area of the property to ensure maintenance is done with accordance to the Milwaukee Code of Ordinances (MCO)
- MCO 79-12 & IPMC 308 – Garbage and debris nuisances
- MCO 80-49 & IPMC 302 Nuisance Vehicles
- MCO 252-74 & 295-505-4 – Parking violations on unpaved or unapproved surfaces
- MCO 252-74 & IPMC 302 – Defective parking surfaces

- MCO 275-35 & IPMC 302 – Graffiti
- MCO 275-81 & IPMC 302 – Landscaping
- MCO 79-12 & IPMC 308 - 24 hour and 72 hour garbage and litter nuisance debris
- MCO 275-81-6 & IPMC 309 - Premises maintained and storage 12 inches above the ground.
- MCO 80-48, MCO 275-80 to 275-82, MCO 77, MCO 78-37, & IPMC 309 - Pest Investigations including rats*, mice*, roaches, bed bugs, and roosting pigeons). (*When applicable.)
- MCO 275-32 & IPMC 302 - Retaining wall
- MCO 252-72 & IPMC 302 - Parking lot maintenance
- MCO 252-71, IPMC 302, IPMC 506, & IPMC 507 – Drainage
- MCO 275-81 & IPMC 309 - Property maintained of grading, and drainage.

Exterior Maintenance

- Conduct inspections verifying continued maintenance on the exterior of the building with accordance to the Milwaukee Code of Ordinance (MCO) and the Uniform Dwelling Code (UDC).
- MCO 275-32 & IPMC 302 - Garage (overhead door, service door defective or in disrepair), paved surfaces (service walks, parking spaces, patios), shed, fence, and gate.
- MCO 275-32 & IPMC 304 - House numbers, gutters and downspouts, soffits, fascia, trim boards, eaves, overhangs, chimney, roof (defective, missing shingles), siding, defective screen doors, windows (broken panes), foundation (disrepair, rodent proof), and paint.
- MCO 275-34 - Storm window or storm screens for habitable rooms provided.
- MCO 275-32 & IPMC 304, IPMC 307 - Windows and doors (storm screens, defective, weather and moisture tight, hardware, unsecured), stairs (treads, risers, stringers, and handrails), porches, decks, porch rails & guards (skirts, spindles, floorboards, balusters).
- MCO 275-32 & IPMC 601 & IPMC 607 - Electrical fixtures and vents.

Interior Maintenance

- Inspect for maintenance in the interior of buildings with accordance to the Milwaukee Code of Ordinances (MCO) and the Uniform Dwelling Code (UDC).
- MCO 275-33 & IPMC 305 - Windows and doors (assembly, hardware, locking devices, operable), ceilings, walls, flooring, ducts, heat registers & covers, and cold air return covers.
- MCO 275-51 & IPMC 502 - Functional, mounted and secured toilet.
- MCO 275-41 & IPMC 305 & IPMC 402 - Lighting of common areas.
- MCO 275-42 & IPMC 403 - Rooms provided with sufficient and adequate ventilation. All bathrooms and toilet rooms provided with ventilation and every window supplied with a screen.
- MCO 275-34 & IPMC 306 - Supplied or required facilities, equipment, or utilities installed correctly and maintained.
- MCO 200-20 - Supplied equipment and appliances maintained.
- MCO 214-7 - Right of Entry
- MCO 214-11 - Improper storage of gasoline or propane.
- MCO 214-12 & IFC Chapter 30 - Proper storage of compressed gas cylinders.
- MCO 214-23 & IPMC 704 - Testing battery-operated smoke alarms
- MCO 214-27 & IPMC 704 - Install and maintain smoke detectors in an approved manner with its listing.
- MCO 262-01, SPS 362 - Carbon Monoxide Detectors
- MCO 264-01, MCO 200-02, SPS 361 - Gas clothes dryers with metal, rigid ducts.
- MCO 275-33 & IPMC Chapter 3 - Stairs (treads, risers, stringers, and handrails), and pests (roaches, bed bugs, rats, and mice).
- MCO 275-33 & IPMC Chapter 4 - Maintenance of tub surround.
- MCO 275-33 & IPMC 504 - Ventilation and approved clearances for heating devices.
- MCO 275-51 to 275-55 Plumbing - Maintenance of required facilities of every dwelling (kitchen sink, toilet, bath and lavatory basin).
- MCO 275-61 - Dwelling units supplied with heating facilities be properly maintained (free of leaks) and

- supply adequate heat, > 67°F. Maintenance of central heating systems free of leaks and sealed.
- MCO 275-81 & IPMC 308 - Units and common areas maintained in a clean and sanitary condition.
- MCO 275-82 & IPMC 309 - Extermination of pests.

Wisconsin DHS Asbestos Inspector Competencies

- Regulatory role of Wisconsin DHS, Wisconsin DNR, OSHA, EPA, Milwaukee Health Department.
- DHS 159.
- AHERA regulations.
- MCO 66-10, 66-12, 66-19.
- Health effects of asbestos ingestion/inhalation.
- Identify interior & exterior asbestos hazards on properties.
- Definition of asbestos containing materials.
- Determine condition of potential asbestos containing materials.
- Determine if ACM requires removal.
- Asbestos remediation methods.
- Required worksite containment measures.
- Required personal protective equipment for lead abatement workers.
- Disposal methods for ACM.

An inspector advancing using step option two must also meet or exceed the thresholds for advancement established in the **QUANTITATIVE CORE COMPETENCIES**.

NIP Inspector, Step Option 3

To advance using step option three, an inspector must obtain the following inspection credentials issued by the International Code Council (ICC) and the State of Wisconsin:

1. ICC – Residential Energy Inspector/Plans Examiner
2. State of Wisconsin UDC Electrical Inspector OR State of Wisconsin UDC Plumbing Inspector Certification

An inspector using step option three must demonstrate a thorough knowledge pertaining to the fundamentals of performing basic construction inspections as they relate to the ICC Residential Energy Inspector/Plans Examiner, as well as the UDC Electrical or Plumbing Inspector Certification. Listed below is a representation of the core competencies that an inspector must have a thorough knowledge of to advance to a step three:

ICC Residential Energy Inspector/Plans Examiner Competencies

General Plan Review

- Determine if a building is required to comply with the provisions of the energy code
- Determine adequacy of construction documents
- Verify whether work related to additions, alterations and change of use are required to comply with provisions of the code for new buildings. Determine if the occupancy or use of the structure has changed so as to require energy code compliance.

General Inspection Requirement

- Verify materials and equipment installed meet code and manufacturer requirements

Building Envelope

- Insulation and fenestration criteria
- Roof and wall assemblies
- Classification of walls and floors as related to insulation requirements
- Sealing of the building envelope

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Building Mechanical Systems

- Calculation of heating and cooling loads
- HVAC equipment performance requirements
- Total building performance

Wisconsin UDC Electrical Inspector Competencies

General Requirements

- Wisconsin SPS 316
- Verify that required permits are issued and valid
- Communicate intent of code using proper terminology
- Electrical theory as applied to installed systems
- Clearances and guarding requirements for electrical installations
- Connections and splices
- Conductors

Services

- Size and rating
- Grounding and bonding

Branch Circuits and Feeders

- Feeder inspection
- Circuit and feeder calculations
- Circuit ratings
- Overcurrent protection
- Required branch circuits
- Panelboards

Wiring Methods and Power/Light Distribution

- Installation methods
- Required outlets
- Boxes and enclosures
- Equipment grounding
- Flexible cords
- Low voltage wiring
- Switches and receptacles
- Luminaires
- Appliances
- HVAC equipment
- Pools and Spas

Wisconsin UDC Plumbing Inspector Competencies

General Requirements

- Wisconsin SPS 382, 383, 384
- Verify that required permits are issued and valid
- Communicate intent of code using proper terminology
- Piping system installation and protection
- Building component damage
- Testing

Fixtures

- Location and installation of required fixtures

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- Material and fixture approvals
- Flow rates and temperatures
- Installation of faucets, fittings and accessories

Water Heaters

- Use and installation
- Service and distribution piping
- Valving, discharge piping and thermal expansion
- Gas piping, combustion air and venting

Water Supply and Distribution

- Service and distribution piping
- Joints and connections
- Cross connection
- Pressure and volume
- Potable water and water treatment

Sanitary Drainage

- Materials, fittings, joints and connections
- Building drains, sewers, branches and stacks
- Backwater valves, sumps, ejectors and cleanouts
- Traps

Vents

- Requirements, methods and installation
- Sizing, materials, joints, connections and grades

An inspector advancing using step option three must also meet or exceed the thresholds for advancement established in the **QUANTITATIVE CORE COMPETENCIES**.

NIP Inspector, Step Option 4

To advance using step option four, an inspector must obtain the following inspection credentials issued by the State of Wisconsin and International Code Council (ICC):

1. State of Wisconsin UDC Electrical Inspector **AND** State of Wisconsin UDC Plumbing Inspector Certification
2. ICC – Fire Inspector 1 Certification

Note: The Department recognizes the NFPA Fire Inspector I or Wisconsin Technical College System Board Fire Service Certification (Semester 1) as an equivalent to International Code Council Fire Inspector I.

Listed below is a representation of the core competencies that an inspector must have a thorough knowledge of to advance using step option four:

ICC - Fire Inspector 1 - Core Competencies

General Inspection Administration

- Communication
- Inquiry Response
- Inspection Reports
- Research
- Identification of Permitting
- Issuance of Permits
- Plan Review
- Recordkeeping
- Complaints

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- Appeals Correspondence
- Legal Proceedings

General Provisions for Fire Safety

- Means of Egress
- Types of Construction
- Equipment and System Readiness
- Emergency Access
- Fire Flow Test and Data
- Emergency Planning - Applicability
- Emergency Planning – Evaluation
- Fire Protection Plan
- Inspection for Construction Type
- Hazardous Conditions

Occupancies

- Occupancy Classification
- Number of Occupants
- Inspection for Occupancy Group

Regulated Materials and Processes

- Industrial/Commercial
- Storage and Handling
- Interior Finishes

Fire Growth

An inspector advancing using step option four must also meet or exceed the thresholds for advancement established in the **QUANTITATIVE CORE COMPETENCIES**.

NIP Inspector, Step Option 5

To advance using step option five, an inspector must obtain the following credentials issued by the State of Wisconsin and the US Department of Housing and Urban Development (HUD):

1. HUD Certified Home Professional OR similar HUD Home Training approved by the Department.
2. Wisconsin Commercial Building Inspector Certification

Listed below is a representation of the core competencies that an inspector must have a thorough knowledge of to advance to a step five:

HUD Core Competencies

- Eligible activities using HUD HOME funding
- Eligible activities using City of Milwaukee CDGA funding
- Role of local participating jurisdictions as related to HOME funded housing rehabilitations
- Milwaukee CDGA income eligibility guidelines
- HUD income eligibility guidelines
- HUD approved forms of assistance relating to HOME funded housing rehabilitation projects
- Milwaukee CDGA income eligibility guidelines
- Minimum and maximum HUD HOME investment limits
- HUD matching contribution requirements
- HOME eligible homeowner rehabilitation costs
- Milwaukee CDGA Neighborhood Improvement Project forms and documents
- HOME period of affordability requirements and inspection protocols
- Role of non-profit agencies and community housing development organizations (CHDO)
- HUD and Milwaukee CDGA eligible administrative and planning costs

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- Eligible property types for HOME funded rehabilitation projects
- Maximum property values of HOME assisted projects after rehabilitation
- Differentiation of HUD homeowner rehabilitation costs
- Property standards related to HUD HOME financed projects
- Knowledge of federal non-discrimination and equal access requirements
- HUD employment and contracting requirements
- HUD site and neighborhood standards
- Allowable reallocations of HUD HOME funds
- Eligibility of religious organizations related to HUD HOME funding
- Role of HUD integrated and information system
- Allowable uses of HUD recaptured funds.

Commercial Code Competencies

- Use and Occupancy Classifications
- Special Use Occupancies and Elements
- Height and Area Limitations Based on Type of Construction
- Fire Resistance and Protection Requirements
- Interior Finishes
- Use and Application of Glass, Glazing, Safety Glazing & Plastics
- Means of Egress
- Accessibility
- Building Systems Such as Lighting, HVAC, Plumbing Fixtures, Elevators, Generators
- Structural Components Such as Masonry, Wood, Steel and their Performance and Stability
- Safeguards during Construction
- Erosion Control and Storm Water Management Regulations
- Special Construction Such as Membrane Structures, Tents & Awnings
- Hazardous Occupancies
- Use & Application of the International Existing Building Code
- Use & Application of the International Fuel Gas Code
- Use & Application of the International Mechanical Code
- Use & Application of the International Energy Conservation Code
- Use & Application of ANSI A117.1 Standard for Accessible and Usable Buildings and Facilities
- Competency of Code Referenced Standards
- General Knowledge of the Milwaukee Code of Ordinances
- Familiarity and Application of the International Fire Code

An inspector advancing using step option five must also meet or exceed the thresholds for advancement established in the **QUANTITATIVE CORE COMPETENCIES**.

NIP Inspector, Step Option 6

To advance using step option six, an inspector must obtain one the following inspection credentials issued by the International Code Council (ICC), education provided by an accredited institution of higher education, or supervisor recommendation based on core competencies listed below:

1. ICC – Accessibility Inspector/Plans Examiner
2. ICC – Building Plans Examiner

And Supervisor Recommendation

OR

ICC – Certified Building Official Certification

- a. Management Module

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- b. Legal Module
- c. Building Codes and Standards Module

OR

Have obtained an associate's degree in engineering, architecture, construction management, construction technology or a field closely related to construction.

OR

Have successfully completed 60 college credits of which a minimum of 39 credits are job-related or engineering-related, architectural design-related or construction management related.

OR

Have obtained a Bachelor's degree in engineering, architecture, architectural engineering, construction management, construction technology, mechanical engineering, or a field closely related to construction.

OR

Have obtained licensure through the State of Wisconsin as a Registered Architect or Professional Engineer.

Listed below is a representation of the core competencies that an inspector must have a thorough knowledge of to advance using step option six as a Certified Building Official with Supervisor Recommendation:

Accessibility Core Competencies (ANSI A117.1 and IBC)

Application and Administration

- Purpose
- Anthropometric Provisions
- Compliance Alternatives
- Referenced Standards
- Definitions

Scoping

- General
- Dwelling and Sleeping Units
- Administration

Building Blocks

- General
- Floor Surfaces
- Changes in Level
- Turning Space
- Clear Floor Space
- Knee and Toe Clearance
- Protruding Objects
- Reach Ranges
- Operable Parts

Accessible Routes

- General
- Accessible Routes
- Walking Surfaces
- Doors and Doorways
- Ramps
- Curb Ramps
- Elevators
- Limited-Use/Limited-Application Elevators
- Private Residence Elevators
- Platform Lifts

General Site and Building Elements

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- General
- Parking Spaces
- Passenger Loading Zones
- Stairways
- Handrails
- Windows

Plumbing Elements and Facilities

- General
- Drinking Fountains
- Toilet and Bathing Rooms
- Water Closets and Toilet Compartments
- Urinals
- Lavatories and Sinks
- Bathtubs
- Shower Compartments
- Grab Bars
- Seats
- Washing Machines and Clothes Dryers

Communication Elements and Features

- General
- Alarms
- Signs
- Telephones
- Detectable Warnings
- Assistive Listening Systems
- Automatic Teller Machines (ATMs) and Fare Machines
- Two-Way Communication Systems

Special Rooms and Spaces

- General
- Assembly Areas
- Dressing, Fitting, and Locker Rooms
- Kitchens and Kitchenettes
- Transportation Facilities
- Holding Cells and Housing Cells
- Courtrooms

Built-In Furnishings and Equipment

- General
- Dining Surfaces and Work Surfaces
- Benches
- Sales and Service Counters
- Storage Facilities

Dwelling Units and Sleeping Units

- General
- Accessible Units
- Type A Units
- Type B Units
- Units with Accessible Communication Features

ICC- Building Plans Examiner - Core Competencies

- **Project administration.** Verify that plans, specifications, and other project information are provided and are complete. Verify that the project is designed by approved persons when required, and has required approvals. Verify that design calculations are submitted in support of structural designs. Verify that alternative materials and methods of construction which are not specified by the building code are listed by an approved standard. Verify that estimated project valuations are consistent with industry norms.
- **Public Information and Legal.** For new and existing structures, answer questions about the need for permits and inspections including special inspections and structural observations, general code compliance of designs, procedures, and materials.
- **Building Planning.** As to building location, verify from the site plan that the building or structure location is in compliance with the requirements of the local ordinances, fire separation regulations, fire access, and setbacks. Verify that final grade will provide the required slope away from the footing or foundation wall. Verify finish floor elevation in flood-hazard areas for compliance with local and federal requirements.
- **Allowable Increases.** Verify that allowable height and area increases are based on the open perimeter, and compliance of access to the open space. Verify compliance of allowable area modifications for automatic fire suppression and special occupancies.
- **Use and Occupancy Classification.** Verify that use and occupancy classification, incidental use areas, accessory uses, and mixed occupancies are correct.
- **Special Detailed Requirements Based on Use and Occupancy.** Verify that special use and occupancy classification is correct. Verify compliance of special provision for atriums, covered mall buildings, high-rise buildings, hazardous occupancies, stages, amusement buildings, and other occupancies or uses.
- **Type of Construction.** Verify that the type of construction is correct for the type of occupancy. Verify that structural members, interior walls, floor/ceiling and roof/ceiling assemblies, roofs, and stairways conform to type of construction requirements.
- **Height and Area Design.** Verify the actual height and floor area designs are within the allowable height and floor area limits.
- **Exterior Walls and Openings.** Verify exterior walls, openings, parapets, and projections conform to the fire-resistive requirements for the type of construction, location on the site, and proximity to other buildings.
- **Interior Environment.** Verify compliance of minimum room dimensions and openings. Verify compliance of lighting, ventilation, exhaust, and minimum sanitation systems.
- **Safeguards during Construction.** Verify precautions are taken and implemented for the safety at the construction site and specified in the construction documents.
- **Accessibility.** Verify accessibility of facilities and building elements to physically disabled persons comply with minimum code requirements.
- **Materials Specifications.** Verify that materials specifications comply with minimum code requirements and listing.
- **Footing and Foundations.** Verify that necessary reports are submitted of the building site's soil capacity and stability when required. Verify that footings are specified with correct size and setbacks and extend below the frost line. Verify that footing and foundation reinforcement meets minimum requirements.

- Stepped Footings and Special Foundations. Verify that stepped footing, piles, piers, and special foundations are correctly specified. Verify that wood members are protected against insects and decay.
- Foundation Walls. Verify that foundation stem walls are correctly sized and have sufficient height above grade. Verify that foundation wall reinforcement, anchor bolts, and fasteners are correct type, size, spacing, and grade. Verify that foundation damp proofing and water proofing is specified where required. Verify maximum unbalanced fill height.
- Floor Construction/Systems. Verify that floor system spans, bearing, and connections comply with minimum code requirements. Verify that materials are protected against insects and decay where required. Verify that subflooring and decking has required thickness, span, and grade and meets installation specifications. Verify compliance of floor design. Verify that crawlspaces have required clearance, ventilation, insulation, screening and access openings.
- Concrete Slabs and Floor Systems. Verify that concrete slabs and floor systems are designed in compliance with standards and material characteristics for specified exposure conditions.
- Wood Wall Systems. Verify compliance of wall systems for proper spans, spacing, bearing, and connections. Verify that pre-engineered wall systems are specified in accordance with their listing and manufacturer's specifications. Verify that wood members are protected against insects and decay where required.
- Steel Framing Systems. Verify steel wall system spans, spacing, bearing, and connections. Verify that pre-engineered steel wall systems are in accordance with their listing and manufacturer's specifications.
- Masonry Wall Systems. Verify compliance of masonry grouting, bonding, mortar type, height, size, lintels, reinforcement, and distance between lateral supports for masonry walls.
- Concrete Wall Systems. Verify compliance of height, size, attachments, bracing, and distance between lateral supports, and reinforcement for concrete wall systems.
- Exterior Wall Coverings. Verify that exterior veneers and siding have correct anchorage, support, and backing. Verify that a weather-resistant barrier is correctly specified for all walls and around all wall openings. Verify that exterior sheathing materials are correctly sized and specified. Verify that plaster, stucco, and metal lath have correct thickness and fasteners.
- Interior Wall Coverings. Verify that wall and ceiling coverings are correct type and thickness, are correctly supported and fastened, and meet minimum sanitation requirements.
- Roof/Ceiling Assemblies. Verify compliance of roof/ceiling construction for span, grade, type, connections, and bearing. Verify that trusses are designed in accordance with code requirements and specified in accordance with their listing and manufacturer's specifications. Verify compliance of roof access and roof top structures. Verify that roof/ceiling insulation is of allowable materials, and is correctly specified. Verify that vapor moisture barriers are correctly specified. Verify ventilation, screens, and access of attic and ceiling area construction.
- Roof Coverings. Verify correct classification of roof coverings, roof slope, installation, flashings, and details, and method of roof drainage.
- Means of Egress. Verify general means of egress requirements, exit access, exits, and exit discharge. Verify compliance of public way, public use areas, and the use of public property. Verify emergency escape and rescue requirements.
- Number, Width, and Arrangements of Exits. Verify that the occupancy load calculations are correct. Verify that the correct number of exits and required egress width are provided. Verify that

arrangement of exits conform to requirements for separation, travel distances, and intervening rooms. Verify compliance of corridor arrangement and dead ends.

- Exit Stairways and Ramps. Verify that stairways and ramps have correct width, rise run, slope, landings, headroom, and height. Verify correct escape illumination, signage, handrails, guards, and other requirements.
- Exit Doors and Egress Windows. Verify that exit doors have the correct direction of swing, size, and type of hardware. Verify that windows intended for use as emergency egress have correct clear opening areas, width, height, operational constraints, window wells and ladders.
- Protected Exit ways. Verify that corridors, exit passageways, stairway enclosures, horizontal exits, exit balconies, and exit courts are provided where required and have the correct fire protection.
- Special Exiting. Verify correct number and width of aisles and correct seat spacing. Verify requirements for grandstands, bleachers, and specific occupancies and uses.
- Fire Alarm and Extinguishing Systems. Determine when fire alarm, sprinkler, and standpipe systems are required; verify compliance of fire suppression systems.
- Area and Occupancy Separations. Verify that area separation and occupancy separation walls and floor/ceiling assemblies are located where required and have correct fire-resistance.
- Fire Resistive Construction. Verify that the materials used for structural members, walls, floor/ceiling, and roof/ceiling assemblies and shaft enclosures comply with requirements for fire-resistive protection. Verify that fire resistance rated construction and location is in compliance with the code and tested assembly requirements.
- Heat and Smoke. Verify that heat, smoke detection, smoke barriers, and control systems are provided where required, and are correctly powered and listed. Verify that curtain boards and smoke and heat vents are correctly specified.
- Interior Finishes. Verify that interior finishes meet required flame-spread and smoke developed classifications based on location, use and occupancy classifications, and are correctly supported.
- Safety Glazing. Verify that safety glazing is specified where required.
- Opening Protective, Penetrations, and Joint Systems. Verify compliance of opening protective, penetrations, and joint systems in fire rated assemblies. Verify that fire blocking and draft stopping is specified where required.
- Miscellaneous Construction. Verify that exterior stairs, ramps, porches, decks, and balconies which are open to the weather support designed loads; are of suitable materials; and have required slope and width, tread, riser, headroom, guards, and handrail dimensions.
- Building Services and Special Construction. Verify compliance of existing structures, membrane structures, temporary structures, pedestrian walkways, tunnels, awnings and canopies, marquees, signs, towers, antennas, elevators, and conveyance systems. Verify seismic restrain, high-wind, and snow-load design requirements. Verify that elevator lobbies, cars, and hoist ways are correctly specified. Verify that elevator shafts are properly vented.
- Fireplaces and Chimneys. Verify that fireplaces, flues, and chimneys are correctly designed and have required clearances from combustible construction.

Supervisor Recommendation

- Past supervisory experience within the City of Milwaukee, another municipality, or in private sector
- Possesses the skills, knowledge, experience and discipline required to train new hires
- Ability to manage section employees in the absence of supervisor

Department Of Neighborhood Services

Neighborhood Improvement Project Inspection Qualitative Core Competencies – 2017

- Ability to work with minimal supervision
- Has demonstrated excellent communicative and interpersonal skills when interacting with program clients and other members of the public
- Able to communicate effectively, and in a detailed manner, with elected officials, program directors, supervisors
- Expected to participate in meetings with elected officials, program directors, supervisors, and the public, with the ability to head meetings when required
- Trusted to take on special assignments, and maintaining confidentiality when necessary
- Understands the functions of various DNS inspection sections
- Demonstrates good judgment
- Exceptional work ethic, with above average attendance record
- Understands and follows DNS work policies
- Ability to construct and maintain project tracking spreadsheets and reports per DNS and CDGA guidelines
- Extensive working knowledge of DNS' LMS computer program

An inspector advancing from step five to step six must also meet or exceed the thresholds for advancement established in the QUANTITATIVE CORE COMPETENCIES, subject to review under Supervisor Recommendation option.

Additionally, an inspector at step six must demonstrate a thorough knowledge of performing complex construction inspections and plan reviews involving all applicable codes, standards and construction methodology. An inspector at step six must demonstrate innate public communication skills and actively participate mentoring less senior inspectors. An inspector achieving step six will possess both core competencies as well as specialized competencies in a wide variety of construction regulations.

ICC –Certified Building Official Competencies

Legal and Management Modules

Financial Management

- Budgets and Financing
- Implementation of Financial Checks
- Verification of Revenue Generation and Expenditures

Records Management

- Maintenance of Employment Records
- Code Enforcement Records

Personnel Management

- Job Descriptions and Personnel Equipment
- Personnel Supervision
- Time-Management Efficiency
- Anti-Discrimination
- Employee Working Conditions
- Employee Discipline and Grievance
- Employee Professional Development

Interagency, Legislative, and Public Communication

- Code Adoption and Amendments
- Alternative Methods through Appeals
- Interagency Cooperation

Department Of Neighborhood Services

Neighborhood Improvement Project Inspection Qualitative Core Competencies – 2017

- Public Service and Information

Code Enforcement

- Permits, Notices and Orders
- Right of Entry
- Hazard Abatement
- Tort Liability
- Legal Due Process
- Court Prosecution

Building Codes and Standards Module

- Architectural Plan Review
- Use and Occupancy Classification
- Construction Classification
- Means of Egress Provisions
- Light, Ventilation and Sanitation Provisions
- Fire Resistance and Fire Protection Provisions
- Accessibility Provisions
- Environmental and Natural Hazard Provisions
- Special Use/Occupancy Provisions

Structural Plan Review

- Structural Provisions
- Material Standards and Construction Methods

Building System Plan Review

- Mechanical Provisions
- Plumbing Provisions
- Electrical Provisions

Field Inspection

- Site Inspection
- Foundation Inspection
- Structural Frame Inspection
- Building Envelope Inspection
- Electrical Inspections
- Plumbing Inspection
- Mechanical Inspection
- Fire Protection Inspection
- Final Building Inspection

An inspector advancing using step option six must also meet or exceed the thresholds for advancement established in the **QUANTITATIVE CORE COMPETENCIES**.